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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,367	08/16/2001	Dietmar Schill	450117-03511	3593

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EXAMINER	
HASHEM, LISA	
ART UNIT	PAPER NUMBER
2614	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/931,367	SCHILL ET AL.	
	Examiner	Art Unit	
	Lisa Hashem	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *26-29,38-49,51-56, 58-62, 64, 65, and 67-72* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *26-29,38-49,51-56,58-62,64,65 and 67-72* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 71, 64, and 65 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim includes the following language: '...A broadcast signal transmitted...'. Signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of 101. Appropriate action is required.

Claim Objections

3. Claim 68 is objected to because of the following informalities: 'receiving deceiving device' should be 'receiving device'. Appropriate correction is required.

4. Claim 72 is objected to because of the following informalities: 'unit ring service' should be 'unit for storing service'. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 26-29, 31-33, 35-36, 38-46, 48, 49, 51-59, 61, and 68-70 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. Patent Application Publication No. 2001/0053944 by Marks et al, hereinafter Marks.

Regarding claim 68, Marks discloses a method for accessing one or more additional services (Fig. 17; e.g. programs, specials, channel 2, My-sidexxKXXX) temporarily included within a main service (Fig. 17; e.g. Top channel) provided by a service provider or network affiliate (Fig. 17; e.g. FM station KXXX), by means of a uni-directional transmission between said service provider (e.g. Internet audio site of a service provider) (section 0034, line 1 – section 0035, line 13) and a receiving device or control device (e.g. control device is a virtual device on a PC; Fig. 1; section 0031, lines 1-5 and lines 11-20; section 0032, lines 1-9) configured to be connected to said service provider (e.g. information of these services are provided from said service provider to a receiving device) (section 0036, lines 1-22),

whereby said uni-directional transmission is performed by a broadcast signal directed from said service provider to said receiving device and

whereby said service channel comprises said main service, said one or more additional services, and service information indicating how to access said at least one additional service in said service channel (section 0054, lines 1-14), said method comprising the steps of:

extracting, from said service channel presently received by said receiving device, service information about at least one of said additional services comprised in said service channel; (Fig. 17; e.g. programs, specials, channel 2, My-sidexxKXXX; section 0054, line 1 – section 0064, line 5);

accessing at least one of said additional services about which service information was extracted from said service channel (section 0054, lines 1-14; section 0061, lines 1-4);

storing said extracted service information in said receiving device (section 0054, lines 1-14; Fig. 17; section 0060, lines 12-23; e.g. in a xxHOMEPAGE or customized playlist; section 0081, lines 1-15; section 0083, line 1 – section 0087, line 9);

updating said stored service information each time the extracting step is executed (section 0054, lines 1-14; section 0086, lines 11-16);

activating said receiving device, or necessary parts thereof, configured to receive the service channel (e.g. Top channel; Fig. 10; Fig. 17: FM KXXX, Top channel) during time intervals in which one or more additional services are sent from the service provider to said receiving device (e.g. updates on surfing conditions; My-xx-KXXX channel); and

returning said receiving device or said parts thereof to a pre-activation state during the remainder of the time,(e.g. when updates are not available; user doesn't change selection),

wherein said processes of activating and returning are carried out on the basis of said stored service information or said latest service information extracted from said service channel (e.g. storing a priority request for updating a user on surfing conditions; playing a modified channel) (section 0054, lines 1-14; section 0059, lines 1-13; section 0095, line 1 – section 0096, line 24; section 0098, lines 1-9).

Regarding claim 26, the method according to claim 68, wherein Marks further discloses the extracting step further comprises extracting a service identification (e.g. Program channel; My-xx-KXXX channel) and a service name (e.g. 'Programs'; playlist) of at least one of said additional services (section 0054, lines 1-14; section 0058, lines 1-15).

Regarding claim 27, the method according to claim 68, wherein Marks further discloses the extracting step further comprises extracting time information including transmission times of at least one of said additional services (section 0058, lines 1-15; Fig. 17: programs).

Regarding claim 28, the method according to claim 68, wherein Marks further discloses the extracting step further comprises extracting service channel information of at least one additional service showing which service channel will be used when transmitting a corresponding additional service from a corresponding service provider via said service channel to said receiving device, respectively (section 0058, lines 1-15).

Regarding claim 29, the method according to claim 28, wherein Marks further discloses the accessing step further comprises connecting said receiving device to at least one of said service channels according to said service channel information and said time information (section 0058, lines 1-15).

Regarding claim 31, the method according to claim 68, wherein Marks further discloses managing the time order of different accessing processes, when said additional services assigned thereto are transmitted at the same time to said receiving device, respectively, wherein said managing process is performed according to said stored service information or said latest extracted service information (section 0059, lines 1-13; section 0095, line 1 – section 0096, line 24; section 0098, lines 1-9).

Regarding claim 32, the method according to claim 68, wherein Marks further discloses subscribing to a service list containing entries representing available additional services of respective service providers, wherein said process of subscribing changes said stored service

information (section 0095, line 1 – section 0096, line 24; section 0098, lines 1-9; section 0099, lines 1-15).

Regarding claim 33, the method according to claim 68, wherein Marks further discloses when the receiving device is in its activated state (e.g. can provide updates on surfing conditions), only accessing that additional services which are transmitted over service channels used by said main services presently received or that have a specific priority level (e.g. updates on surfing conditions have a priority level) (section 0059, lines 1-13; section 0095, line 1 – section 0096, line 24; section 0098, lines 1-9).

Regarding claim 35, the method according to claim 68, wherein Marks further discloses the step of monitoring all additional services provided by a corresponding service provider during the time in which said receiving device receives a main service from said corresponding service provider (Fig. 17; section 0054, line 1 – section 0064, line 5).

Regarding claim 36, the method according to claim 68, wherein Marks further discloses the step of storing service data extracted from said at least one additional service, after having accessed them in the accessing step, in said receiving device, said stored service data being accessible (section 0054, lines 1-14; section 0060, lines 12-23; section 0081, lines 1-15; section 0083, line 1 – section 0087, line 9; section 0098, lines 1-9).

Regarding claims 69, 38-46, 48, and 49, please see the rejections to claims 68, 26, 27, 28, 29, 68, 68, 31, 32, 33, 35, and 36, respectively, to reject claims 69, 38-46, 48, and 49.

Regarding claims 70, 51-59, 61, and 62, please see the rejections to claims 68, 26, 27, 28, 29, 68, 68, 31, 32, 35, and 36, respectively, to reject claims 70, 51-59, 61, and 62.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 34, 47, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marks as applied to claims 68, 69, and 70 above, respectively, and further in view of U.S. Patent No. 6,587,127 by Leeke et al, hereinafter Leeke.

Regarding claim 34, the method according to claim 68, wherein Marks further discloses the step of eliminating subscribed services in said service list which preferably have no specific priority level (section 0097, lines 1-9).

Marks does not disclose the step of eliminating subscribed services if the power resources of said receiving device fall below a predetermined limit.

Leeke discloses a method of accessing at least one additional service temporarily included within a respective main service provided by a respective service provider (providing audio content), said method using a receiving device or client apparatus (Fig. 1: 104, 106) adapted to be connected to said respective service provider (col. 4, lines 8-30 and lines 50-67), comprising the steps of: extracting from a main service (audio content available) presently received by said receiving device service information (events) about at least one of said corresponding additional services (content from special occurrences, conventions, announcements, news, and sports events); accessing (by a point-and-click operation) at least one of said additional services about which service information was extracted (selected) according to

said respective extracted service information; storing said extracted service information in said receiving device (in the smart card of the receiving device; Fig. 1: 140, 146); updating said stored service information each time the extracting step (selection) is executed (col. 8, lines 21-27; col. 10, lines 5-14; col. 14, lines 14-30).

Leeke further discloses subscribing to a service list containing entries representing available additional services of respective service providers, wherein said process of subscribing changes said stored service information (col. 16, line 43 – col. 17, line 3; Fig. 14) and the step of eliminating subscribed services in said service list which preferably have no specific priority level if the power resources of said receiving device fall below a predetermined limit (period of inactivity) (col. 6, lines 11-20).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the method of Marks to include the step of eliminating subscribed services if the power resources of said receiving device fall below a predetermined limit as taught by Leeke. One of ordinary skill in the art would have been lead to make such a modification to activate the receive device less frequently to save energy.

Regarding claims 47 and 60, please see the rejection to claim 34 above, to reject claims 47 and 60.

9. Claims 72 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marks in view of Leeke.

Regarding claim 72, Marks discloses an apparatus or control device (e.g. control device is a virtual device on a PC; Fig. 1; section 0031, lines 1-5 and lines 11-20; section 0032, lines 1-9) for accessing at least one additional service (Fig. 17; e.g. programs, specials, channel 2, My-

sidexxKXXX) provided by at least one service provider or network affiliate (Fig. 17; e.g. FM station KXXX) in a respective service channel uni-directionally transmitted between said service provider (e.g. Internet audio site of a service provider) (section 0034, line 1 – section 0035, line 13) and a receiving device (e.g. control device is a virtual device on a PC) configured to be connected to said service provider (e.g. information of these services are provided from said service provider to a receiving device), whereby said uni-directional transmission is performed by a broadcast signal directed from said respective service channel comprises said at least one additional service, a representative main channel, and service information indicating how to access said one or more additional services in said service channel (section 0054, lines 1-14), said apparatus (see Fig. 1) comprising:

receiving means, connectable via at least one service channel to said at least one service provider for receiving and extracting at least one additional service from a service channel broadcasted by said at least one service provider (Fig. 17; e.g. programs, specials, channel 2, My-sidexxKXXX; section 0054, line 1 – section 0064, line 5);

a user interface (see Fig. 1) for informing a user and for controlling said apparatus by said user; and

a processing unit (e.g. PC) connected to said receiving means and to said user interface, the processing unit comprising:

a service memory means connected to said processing unit for storing service data extracted by said receiving means from said at least one additional service according to said service information (section 0054, lines 1-14; Fig. 17; section 0060, lines 12-23; e.g. in a

xxHOMEPAGE or customized playlist; section 0081, lines 1-15; section 0083, line 1 – section 0087, line 9); and

means for activating said receiving means and said processing unit or necessary parts thereof for receiving the main service (e.g. Top channel; Fig. 10) during time intervals in which an additional service (e.g. updates on surfing conditions; My-xx-KXXX) is transmitted from the service provider to said receiving device (e.g. based on a user's request),

returning said receiving device or said parts thereof to a deactivated state before activation during time intervals when the receiving device or necessary parts thereof are not activated (e.g. when updates are not available; player has not changed selection),

said processes of activating and returning being carried out on the basis of said stored service information or latest extracted service information (e.g. storing a priority request for updating a user on surfing conditions) (section 0054, lines 1-14; section 0059, lines 1-13; section 0095, line 1 – section 0096, line 24; section 0098, lines 1-9).

Marks does not disclose a scheduler means, a service information memory means, and a wake-up control means.

Leeke discloses an apparatus for accessing at least one additional service provided by at least one service provider (e.g. radio station), said apparatus (see Fig. 1) comprising:

receiving means (Fig. 1, 126) connectable via at least one service channel to said at least one service provider for receiving at least one additional service from said service provider (col. 4, lines 8-30 and lines 50-67; col. 8, lines 3-31);

a user interface (see Fig. 2) for informing a user and for controlling said apparatus by said user; and a processing unit (Fig. 1, 122) connected to said receiving means and to said user interface, the processing unit comprising:

a scheduler means (e.g. scheduler or event manager) connected to said processing unit for controlling said process of accessing said at least one additional service;

a service information memory means for (e.g. events category) storing service information needed by said scheduler means to control said apparatus (col. 8, lines 3-31);

and a service data memory means (e.g. library category) inherently connected to said processing unit for storing service data extracted by said receiving means from said at least one additional service according to said service information,

wherein said scheduler means comprises a wake-up control means connected to said receiving means and said processing unit for activating said receiving means and said processing unit or necessary parts thereof for receiving the main service during time intervals in which an additional service is transmitted from the service provider to said receiving device (a notification sent of an event or program that may be of interest based on expressed interest of the user or monitoring user activity),

returning said receiving device or said parts thereof to a deactivated state during time intervals when the receiving device or necessary parts thereof are not activated (e.g. when the event is over; period of inactivity; no station is active) (col. 14, line 52 – col. 15, line 2; col. 15, lines 20-26; col. 15, line 66 – col. 16, line 2; col. 16, lines 16-24; col. 16, line 34 – col. 17, line 3),

said processes of activating and returning being carried out on the basis of said stored service information or latest extracted service information (see Fig. 1; col. 16, line 43 – col. 17, line 32; wherein the storing of information and scheduler means is stored in the smart card).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the method of Marks to include a scheduler means, a service information memory means, and a wake-up control means as taught by Leeke. One of ordinary skill in the art would have been lead to make such a modification to determine the transmission of an additional service.

Regarding claim 67, the apparatus according to claim 72, wherein Leeke further discloses a conditional access means to decrypt an encrypted service to permit access (col. 6, lines 36-43).

Response to Arguments

10. Applicant's arguments with respect to claims 26-29, 31-36, 38-49, 51-56, 58-62, 64, 65, and 67-72 have been considered but are moot in view of the new ground(s) of rejection.

11. In regards to Applicant's remarks filed on 10-16-2006 that Marks does not teach '...the main service, one or more additional services, and the service information are transmitted in the same service channel...'. Examiner disagrees. Marks clearly discloses extracting from a main service (e.g. Top Channel) a service information about additional services (e.g. xxSURF sidechannel is available; xxTALK; xxRADIO), wherein in section 0054 of Marks, the main service (e.g. KXXX Top channel), one or more additional services (My-xxKXXX, channel 2, programs, specials), and the service information (e.g. My-sideKXXX playlist: m-n-o-p; Fig. 17) is transmitted on the same service channel. If a user does not want to hear the selection on the Top Channel, FM Station KXXX transmits a new side channel using the Sent selections from the

Top channel as a guide. The Top channel and the additional services are transmitted from the same channel (e.g. FM Station KXXX) (section 0054, line 1 – section 0058, line 15).

In conclusion, the prior art discloses the claimed invention. Please see all rejection(s) above.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 Form.

13. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-8300 (for formal communications intended for entry)

Or call:

(571) 272-2600 (for customer service assistance)

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Hashem whose telephone number is (571) 272-7542. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lh
December 14, 2006

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